



Statewide Demand Response Programs - Process Evaluation

DRMEC Workshop

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Overview of Presentation

- Brief Program Description
- Evaluation Scope Overview
- Discuss key findings to-date
 - Account Representative feedback
 - Online survey early results
- Next steps

Statewide Nonresidential DR Process Evaluation

- Sponsors: California investor-owned utilities (PG&E, SCE and SDG&E) and regulators (the Demand Response Measurement and Evaluation Committee or DRMEC)
- Programs addressed by evaluation:
 - Reliability program (Base Interruptible or BIP)
 - Day-ahead programs (Critical Peak Pricing – voluntary and default)

BIP Program Highlights

(Base Interruptible Program)

- For customers who can commit to curtail at least 15% of their monthly average maximum demand or 100 kW, whichever is greater
- Two notification options: 30 minutes or 3 hours
- Penalty structure reinforces that risk of penalty outweighs incentives for participation during program events

CPP-E/V Program Highlights

(Critical Peak Pricing – Emergency (SDG&E Only) and Voluntary)

- Captures customers able to curtail load with 30-minute notifications
- Incentive to shift business operations to immediately reduce load and avoid paying Critical Peak Pricing rates

CPP-D Program Highlights

(Critical Peak Pricing – Default SDG&E only)

- SDG&E launched CPP-D in May 2008 (PG&E and SCE planning to launch in 2009/2010)
- One day notice
- Intended to capture traditional non-participants by requiring customers to opt-out
- Incentive to shift business operations to immediately reduce load and avoid paying Critical Peak Pricing rates

Evaluation Objectives

- Document the program theory
- Evaluate marketing strategies
- Assess program implementation and delivery strategies in eliciting customer response to events, customer retention and reasons for opting out, and overall customer satisfaction
- *Recommend ways to integrate demand response programs with energy efficiency programs for 2009*

Evaluation Scope

- Multi-mode data collection strategy:
 - Program manager in-depth interviews to help inform the Research Plan
 - Account representative workshop and in-depth interviews
 - Participating customer online survey
 - Participating customer in-depth interviews

Key Findings: Account Rep Interviews

- Reps will target the programs according to key customer attributes that increase likelihood to participation; such as high-load factor
- Reps will assess whether there is high risk to customer satisfaction before marketing the program
- Reps play an important role in assisting customers to identify opportunities to reduce load and would like more assistance in this area (TA/TI)
- Reps state that customers strongly desire real-time feedback on their actions during and after an event
- Reps felt that a lack of an energy management systems was a barrier to participation with customers that have multiple sites

Key Findings: Account Rep Interviews

- Improve technical support services to help customers identify opportunities to reduce energy load.
- Ensure that participation in DR programs include a strong component to assist customers with identifying curtailment measures
- Leverage multiple channels to inform customers of CPP-Default.
- Continue to have wide selection of DR programs.
- Provide participating DR customers with feedback on their performance during events.

Online survey: Key Findings

Sample disposition (number of customers with email addresses)

Survey	Survey Launch Date	Sample	Target	Completes	Complete as Percent of Sample
CPP-D SDG&E	9/9/2009	409	159	44	11%
CPP-D Opt Out SDG&E	9/9/2009	186	51	23	12%
CPP-E SDG&E	9/9/2009	26	4	3	12%
BIP SDG&E	9/9/2009	8	2	0	0%
BIP SCE	8/26/2009	445	72	84	19%
BIP PG&E	8/31/2009	109	18	21	19%
CPP-V SCE	8/26/2009	139	27	23	17%
CPP-V PG&E	8/31/2009	338	84	58	17%
Total	n/a	1,660	417	256	15%

Online Survey: Key Findings -- Program Awareness

- Awareness of program/rate is very high across all customers *who responded to the survey*
 - CPP-V, CPP-E, BIP customers have program awareness rates above 90%
 - CPP-D customer awareness is above 80%
 - 70% of CPP-D Opt-Out customers are aware that their organization opted out of the CPP-D rate

Online Survey: Key Findings – Tool and Event Awareness

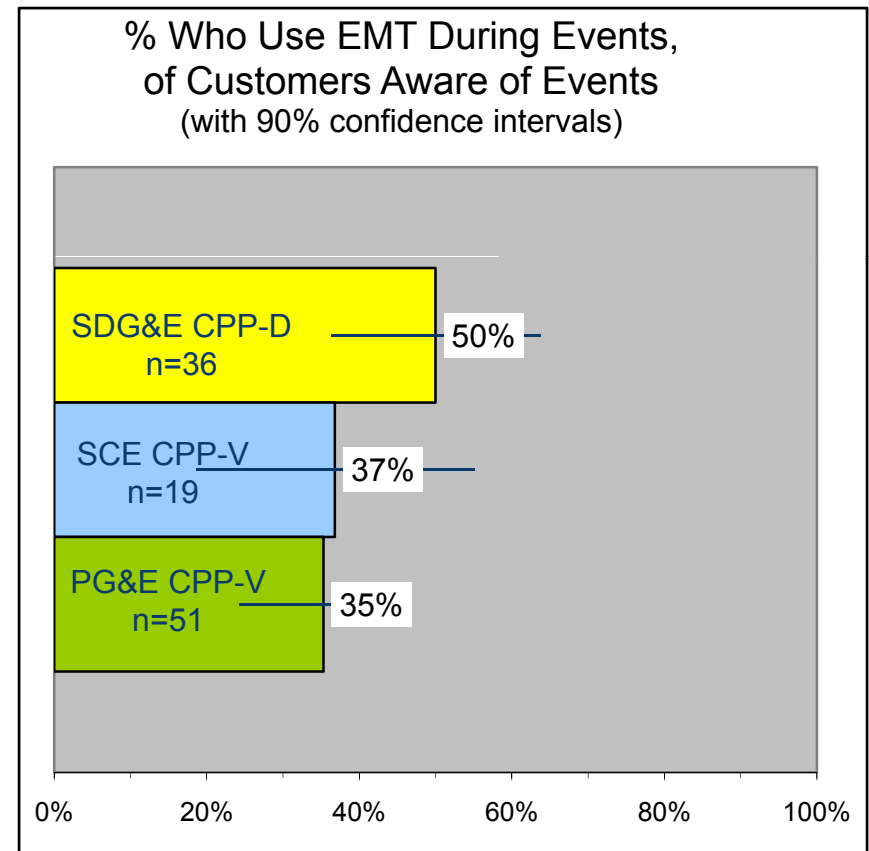
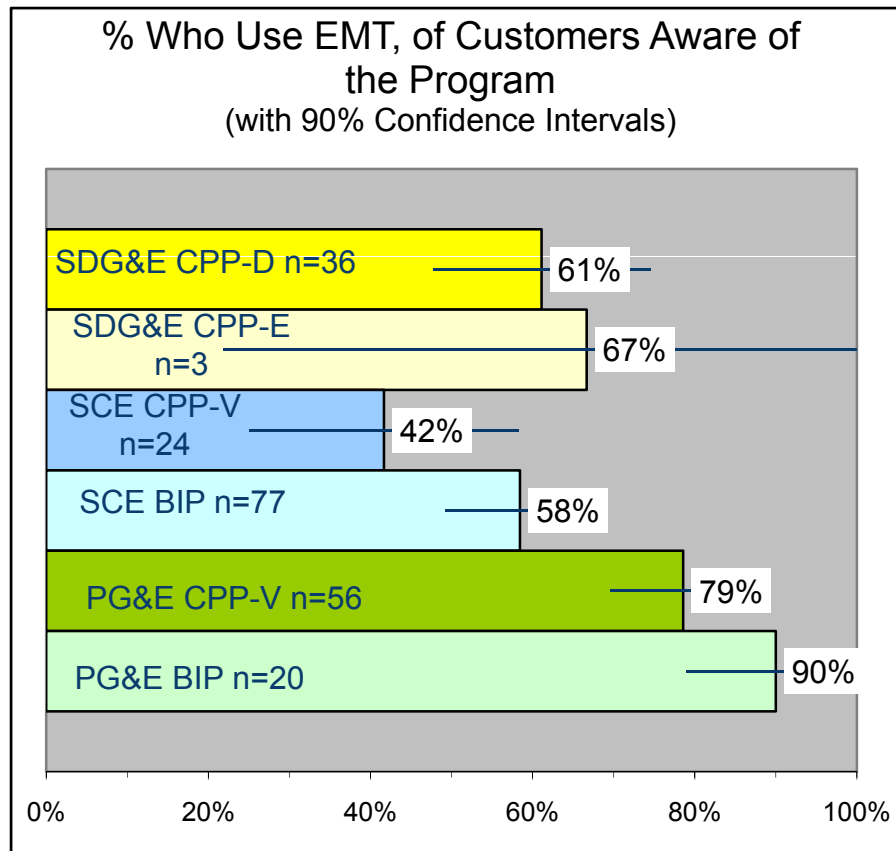
- Awareness of utility online energy management tool is also high
 - More than 90% of CPP-V, CPP-E, and BIP customers (*those who are aware of their respective programs*) are aware that they have access to a utility Energy Management Tool (EMT)
 - 75% of CPP-D customers are aware of their utility EMT
- Event awareness is also high, at around 82% of customers who are aware of the program

Online Survey: Key Findings -- Satisfaction

- Customer satisfaction regarding program communications is high across all customers *who responded to the survey*
 - 90% of CPP-V, CPP-E, BIP customers are very and somewhat satisfied with utility communications about their respective programs
 - 75% of CPP-D customers are very and somewhat satisfied with utility communications about the CPP-D rate
 - Nearly 90% of CPP-D opt-out customers are at least somewhat satisfied with utility communications regarding the CPP-D rate
- Customer satisfaction rates for event notification is very high among survey responders
 - Over 95% of CPP-V customers and CPP-D customers are at least somewhat satisfied about utility communications related to events

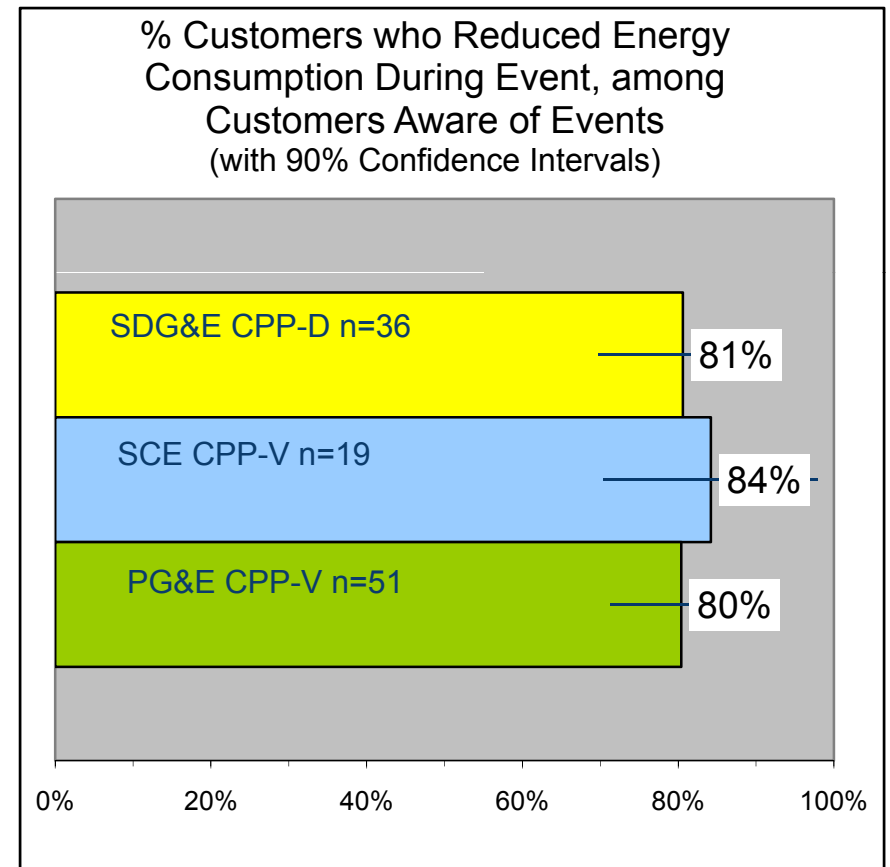
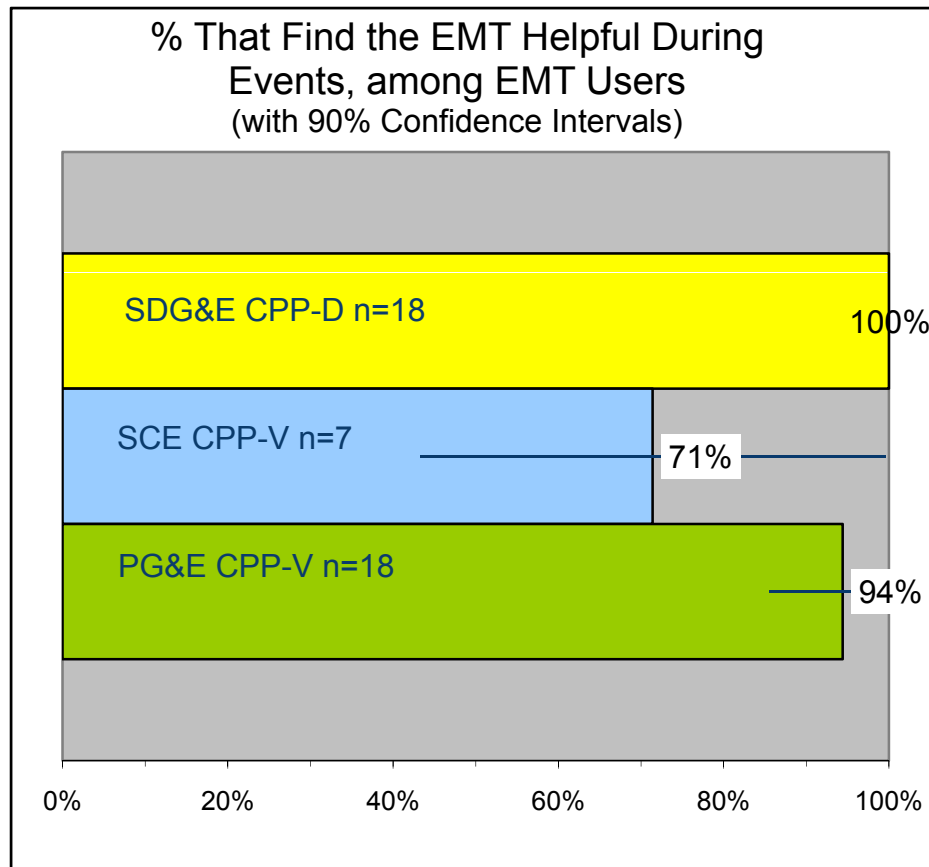
Online Survey: Key Findings

Energy Management Tool (EMT), General Use and Use During Events



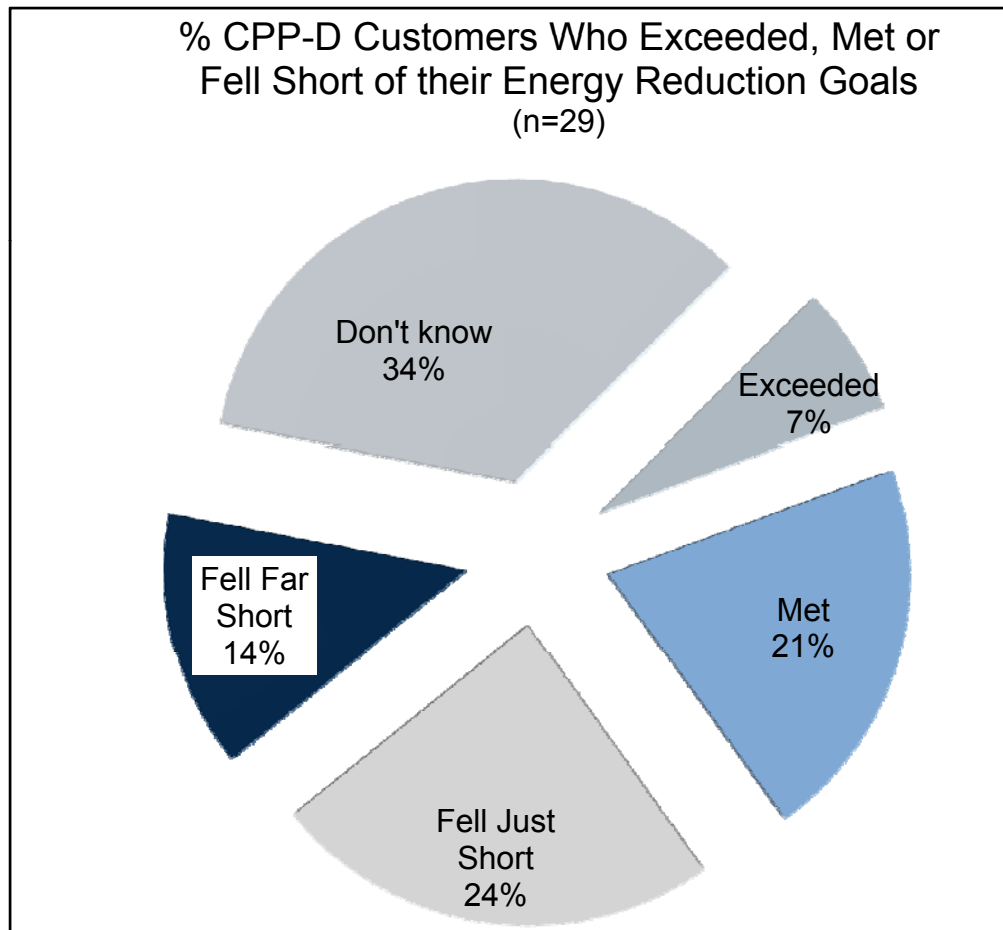
Online Survey: Key Findings

Managing Energy Consumption During Events



Online Survey: Key Findings

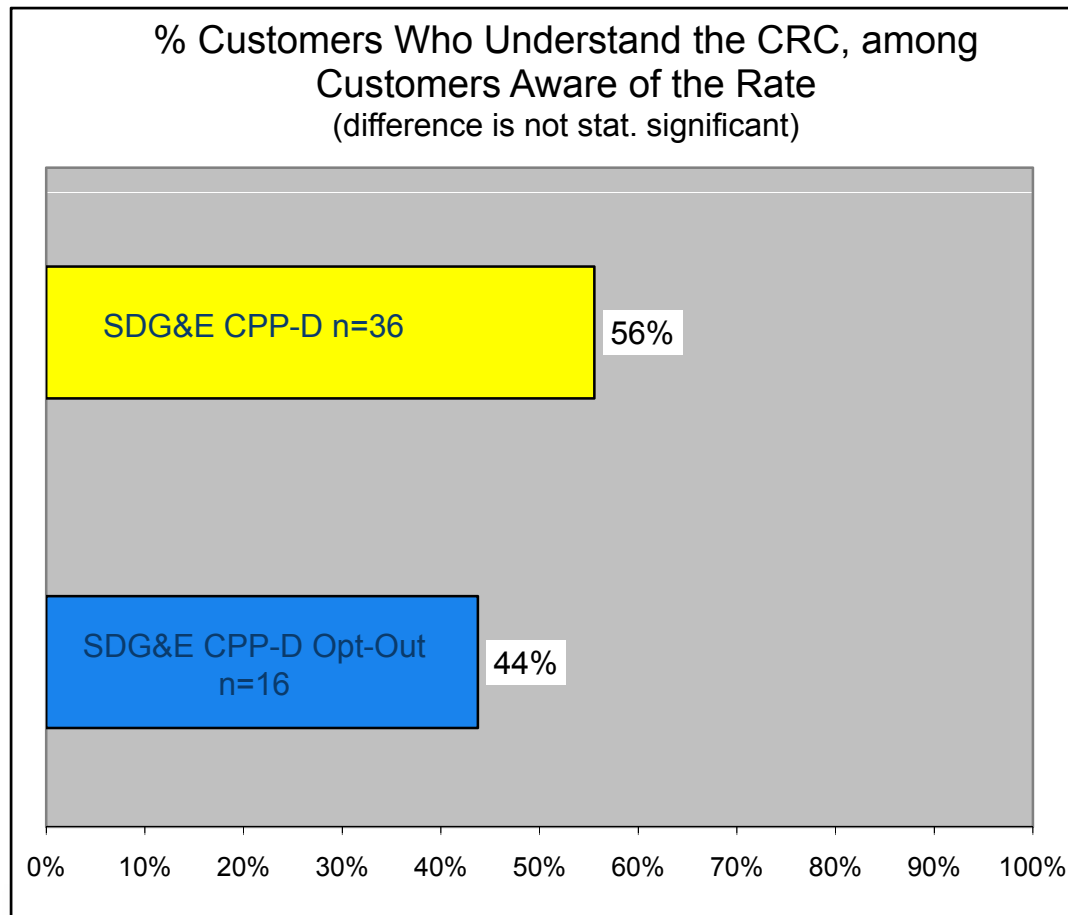
Event Impact (on SDG&E CPP-D Customers Who Reduced their consumption during the event)



Half of CPP-D customers said there was an operational impact on their business due to their event response (n=29)

Online Survey: Key Findings

Capacity Reservation Charge (CRC) – SDG&E CPP-D Only



Half of CPP-D customers who understand the CRC selected their CRC (vs. the default CRC=50%) (n=20)

Online Survey: Suggestions for Program/Rate Improvement

- Suggestions among CPP-V/E and BIP respondents for improving programs overall include:
 - Greater incentives for program participation
 - More communications from account reps or utility
 - Provide real-time energy usage data and simplify notification
 - Provide detailed savings analysis to customer
- CPP-D Opt-out respondents list the following changes as necessary for them to opt in to the CPP-D rate:
 - Utility would need to increase savings above costs of lost productivity incurred by customers during event
 - Increase incentives overall

Online Survey: Suggestions Related to Events

- Suggestions from CPP-V and CPP-D respondents about improving communications during an event include:
 - Provide ability to notify multiple recipients of event
 - Provide earlier notification
 - Provide more information in the notifications
- CPP-V and CPP-D customers request the following improvements to help them reduce demand during an event:
 - Specific information on curtailment opportunities
 - Provide real-time energy usage data
 - On-site energy usage evaluations/audits from utility

Next Steps

- Conduct in-depth participant interviews
 - Will probe on actions taken and plans for responding to future events
 - Will probe on reasons for opting out of CPP-D
 - Intend to get 110 completes from samples that include customers who completed online survey and customers who did not complete the survey
- Prepare draft and final reports



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